

REMARKS

Claims 1, 3 and 7 have been amended in order to more particularly point out, and distinctly claim the subject matter to which the applicants regard as their invention.

Claim Rejections under 35 USC §112

Claims 1-4, and 7 stand rejected under 35 U.S.C. §112, first and second paragraphs, as the claimed invention is not described in such full, clear, concise and exact terms as to enable any person skilled in the art to make and use the same, and/or for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2 the Examiner asserts that third member must be element (92) which is not spline engaged with the second member (11) on the outer ring. Page 13, lines 21-22 of the specification indicates that the third member is a shaft-side member and therefore could be drive sprocket (92). Page 14, lines 16-20 indicate that the drive sprocket (92) is spline engaged with the pump impeller hub (31a) (the first member). Further, on page 17, line 20 through page 18, line 3 it is indicated that the third member is spline engaged with the first member.

It should be noted that claim 2 was amended in the amendment filed on November 24, 2004 to eliminate the reference that the third member is spline engaged with the second member. Apparently, the Examiner did not notice this amendment. The Examiner's grounds of rejection is respectfully traversed since claim 2 has been amended to eliminate this reference. Therefore,

withdrawal of the rejection of claim 2 under 35 U.S.C. §112, first and second paragraphs, is respectfully requested.

Regarding claim 4 the Examiner indicates that the rollers recited in the claim is not directed to an elected species. In the election of species filed on August 30, 2002 the applicant elected the species shown in Figures 2-4. In these figures a radial ball bearing (12) is shown having an inner ring (121), an outer ring (122), and a ball (125) which is rollable and rotatably sandwiched between such bearing rings (121 and 122). Therefore, the Examiner is correct that rollers as recited in claim 4 were not elected. However, in the amendment filed November 24, 2004 claim 4 was withdrawn from consideration. Apparently the Examiner did not notice this change in the status of claim 4. Therefore the Examiner's grounds of rejection is respectfully traversed.

On page 3 of the Office Action the Examiner asks two questions. The Examiner would like to know what the third member is and what the periphery region is. The third member is drive sprocket (92) as indicated in page 5, line 9 of the specification. The periphery region is area 12c as shown in figures 3 and 4 of the specification.

Therefore, withdrawal of the rejection of Claims 1-4, and 7 under 35 U.S.C. §112, first and second paragraphs, is respectfully requested.

Claim Rejections under 35 USC §102

Claims 1-4 and 7 are rejected under 35 U.S.C. §102(e) as being anticipated by Dickinson.

The present invention is a bearing (12) structure for a transmission in which the bearing (12) is supported by the bearing housing (11a) on an outer peripheral face (12b) of the outer ring, and rotatably supports the hub (31a) on the inner peripheral face (12a) of the inner ring. In this bearing (12), the inner ring is formed to be longer and protrude further than the outer ring in the direction of the rotation axis, and an engagement/support face (12c) for enagageably supporting a drive sprocket (92) is formed on the outer periphery of the inner ring. The drive sprocket (92) is able to receive the transmittance of rotating torque by engaging with the hub-side spline (31c) on spline (92c).

Dickinson describes a crank bearing, as illustrated in figure 2, having an inner ring (20), an outer ring (21) and a number of antifriction elements (22) sandwiched between the two. In addition, a flange structure (17) is attached to the outer ring (21). Based on Figure 2 it would appear that antifriction elements (22) is a radial bearing.

The most distinguishable difference in structure between the present invention as defined in claim 1 and Dickinson is that, in the bearing of claim 1 (the present invention), the inner periphery of the inner ring, the outer periphery of the outer ring and the inner or outer periphery of the supporting part (such as the rotation member face 12c in Fig. 4) are coaxial or concentric with each other, while in Dickinson, the inner periphery of the inner ring 20 is eccentric with the outer periphery of the outer ring and the land 32 of the inner ring 20. Therefore, the Examiner's grounds of rejection is respectfully traversed.

Claim 1 patentably distinguishes over the prior art relied upon by reciting,

“A bearing structure, comprising: an inner ring; an outer ring coaxially disposed on the outer periphery of said inner ring; a rolling element rollably sandwiched between said inner ring and said outer ring; a supporting part of said inner ring integrally formed with and protruding axially from said inner ring; wherein, said inner ring being capable of supporting a first member on its inner periphery; said outer ring being capable of supporting a second member on its outer periphery in a relatively rotatable manner to said first member; said supporting part being capable of coaxially supporting a third member and also being integrally and coaxially rotatable with said at least one of said inner ring and said outer ring, wherein said supporting part protrudes in a direction of a rotational axis of the bearing structure and is coaxial with a rotational axis of the inner and outer rings, wherein a periphery region of said supporting part to which the third member is being fitted, is concentric with the inner periphery of the inner ring as well as the outer periphery of the outer ring; and wherein the bearing structure is a radial bearing which supports radial loads.” (Emphasis Added)

Therefore, withdrawal of the rejection of Claims 1-4 and 7 under 35 U.S.C. §102(e) as being anticipated by Dickinson is respectfully requested.

Conclusion

In view of the aforementioned amendments and accompanying remarks, the claims, as amended, are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

U.S. Patent Application Serial No. 09/880,081
Response to OA dated March 4, 2005

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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